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MAY - 4 2000

510(k) summary for the NOGA Mapping System

510(k) Notification submitted by:

Biosense Webster, Inc. 3333 Diamond Canyon Rd.

Diamond Bar, CA 91765

USA

Phone: +1-800-729-9010 Fax: +1-909-468-3781

Contact person:

Amy Walters

Director of Regulatory Affairs

Proprietary device name:

NOGA™ Cardiac Navigation System

Classification name:

Programmable diagnostic computer

(per 21 CFR 870.1425)

Common device name:

Cardiac mapping system

Predicate device:

NOGA cardiac navigation system

510(k) No. K990494

Manufacturer:

Biosense Webster (Israel) Ltd.

POB 2009

Tirat HaCarmel, 39120

Israel

The NOGA mapping system is designed to acquire, analyze, and display electro-mechanical maps of the human heart. The maps are reconstructed using the combination of information gathered from the integration of intracardiac electrograms with their respective endocardial locations. In the NOGA mapping system the location information needed to create the cardiac maps is acquired simultaneously with the local electrogram using locatable-tip catheters equipped with a magnetic location sensor. The NOGA system also allows presentation of electroanatomical maps as a function of time over the cardiac cycle (electromechanical maps).

Currently, cardiac mapping is performed using a roving mapping catheter, a computerized mapping system, and fluoroscopy to determine the location of the tip of the mapping catheter. In the conventional procedure both the patient and the physician are exposed to harmful ionizing radiation during the course of the lengthy procedure. The NOGA mapping system enables cardiac mapping using a magnetic location technology, and may reduce exposure to dangerous ionizing radiation.

The NOGA mapping system complies with the following safety standards:

EN 60601-1/1990

EN 60601-1 A1/1993

EN 60601-1 A2/1995

EN 60601-2-27/1994



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The non-clinical bench and animal testing show that the device is as safe and as effective as the previously marketed device to which it is being compared and does not raise any new questions of safety or effectiveness.



MAY - 4 2000

Food and Drug Administration 9200 Corporate Boulevard Rockville MD 20850

Ms. Amy Walters Director of Regulatory Affairs Biosense Webster, Inc. 3333 Diamond Canyon Road Diamond Bar, California 91765

Re: K000332

Trade Name: NOGA™ Cardiac Navigation System

Regulatory Class: II (two)

Product Code: 74 DQK Dated: April 6, 2000 Received: April 7, 2000

Dear Ms. Walters:

We have reviewed your Section 510(k) notification of intent to market the device referenced above and we have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act). You may, therefore, market the device, subject to the general control provisions of the Act. The general control provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (Premarket Approval), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 895. A substantially equivalent determination assumes compliance with the Current Good Manufacturing Practice requirements, as set forth in the Quality System Regulation (QS) for Medical Devices: General regulation (21 CFR Part 820) and that, through periodic QS inspections, the Food and Drug Administration (FDA) will verify such assumptions. Failure to comply with the GMP regulation may result In reply to: regulatory action. In addition, FDA may publish further announcements concerning your device in the Federal Register. Please note: this response to your premarket notification submission does not affect any obligation you might have under sections 531 through 542 of the Act for devices under the Electronic Product Radiation Control provisions, or other Federal laws or regulations.

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This letter will allow you to begin marketing your device as described in your 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your, device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801 and additionally 809.10 for in vitro diagnostic devices), please contact the Office of Compliance at (301) 594-4648. Additionally, for questions on the promotion and advertising of your device, please contact the Office of Compliance at (301) 594-4639. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR 807.97). Other general information on your responsibilities under the Act may be obtained from the Division of Small Manufacturers Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its internet address "http://www.fda.gov/cdrh/dsma/dsmamain.html".

Sincerely yours,

James E. Dillard III

Director

Division of Cardiovascular and Respiratory Devices Office of Device Evaluation Center for Devices and Radiological Health

Enclosure

Indications for use statement

510(k) No: <u>KOOO 33</u>2

Device Name: NOGA cardiac navigation system

Indications For Use:

The intended use of the NOGA cardiac navigation system is catheter-based cardiac mapping.

The NOGA system allows real-time display of cardiac maps in a number of different formats. Maps may be displayed as cardiac electrical activation maps, cardiac electrical propagation maps, cardiac electrical potential maps, cardiac chamber geometry maps, cardiac dynamic maps, cardiac hemodynamic maps, and cardiac electromechanical maps. The acquired patient signals, including body surface ECG, intracardiac electrograms and intracavity or intravascular blood pressure may also be displayed in real time on the display screen.

(Division Sign-Off)

Division of Cardiovascular, Recalescent

and Neurological Devices